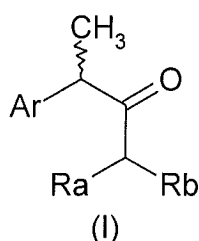


1. **(Currently Amended)** A method for the treatment of diseases that involve IL-8 induced human PMNs chemotaxis ~~making a medicament comprising administering to a subject in need thereof an effective amount of a composition comprising admixing~~ (R,S)-1-Arylethylketone compounds of formula I and their

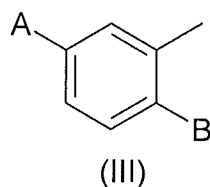


single (*R*) and (*S*) enantiomers:

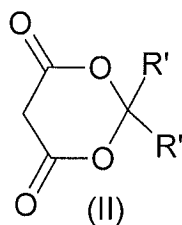
- Ar represents phenyl, optionally substituted by one to three substituents, which are the same or different from one another, selected from:

or Ar represents 4-thienoyl-phenyl, 4-(1-oxo-2-isoindoliny)-phenyl, 3-chloro-4-(2,5-dihydro-1H-pyrrol-1-yl)phenyl, 6-methoxy- β -naphthyl, 1-hydroxy-phenyl-1-methyl;

or Ar represents a residue of formula III:



wherein A is benzyl, phenoxy, benzoyl, benzoyloxime, 1-hydroxy-phenyl-1-methyl, B is hydroxy, C₁-C₄-acyloxy or a group of formula -O-C(=S)-N(CH₃)₂, or -S-C(=O)-N(CH₃)₂;
 - Ra and Rb are independently chosen in the group of hydrogen, linear or branched C₁-C₆ alkyl, phenyl, α-or β-naphthyl, 2, 3, 4-pyridyl, C₁-C₄-alkylphenyl, C₁-C₄-alkyl(α-or β-naphthyl), C₁-C₄-alkyl(2, 3, 4-pyridyl), cyano (-CN), carboxyamide, carboxyl or carboxyesters of formula CO₂R" wherein R" is the residue of a linear or branched C₁-C₆ aliphatic alcohol, a phosphonate PO(OR")₂ wherein R" is as defined above, a group of formula -X-(CH₂)_n-Z, wherein X is a CO, SO, SO₂ group; Z is H, *tert*-butyl, isopropyl, CO₂R", CN, phenyl, α-or β-naphthyl, 2, 3, 4-pyridyl, C₃-C₆ cycloalkyl, NH-BOC, NH₂; n is zero or an integer from 1 to 3;
 or Ra and Rb, with the carbon atom to which they are bound, form a cyclic residue 4, 6-dioxo-1, 3-dioxanyl-2, 2-disubstituted of formula II:



wherein R' is methyl or ethyl, or the two groups R' form a cyclohexane or cyclopentane ring,

~~in an amount effective for the treatment of diseases that involve IL-8 induced human PMNs chemotaxis, together with a pharmaceutically acceptable carrier.~~

2. **(Previously Presented)** The method according to claim 1 wherein Ar represents a residue 4-isobutyl-phenyl, 3-benzoyl-phenyl, 5-benzoyl-phenyl, 2-acetoxy-phenyl, 3-phenoxy-phenyl.

3. **(Previously Presented)** The method according to claim 1 or 2 in which the compound is selected from:

methyl (R)(-)-4-[(4'-isobutyl)phenyl]-3-oxopentanoate;

methyl (S)(+)-4-[(4'-isobutyl)phenyl]-3-oxopentanoate;

(R,S) 4-[(4'-isobutyl)phenyl]-3-oxopentanoic acid;

methyl (R)(-)-4-[(3'-benzoyl)phenyl]-3-oxopentanoate;

(R)(-)-3-[(4'-isobutyl)phenyl]butan-2-one;

(S)(+)-3-[(4'-isobutyl)phenyl]butan-2-one;

(R)(-)-3-[(3'-benzoyl)phenyl]butan-2-one;

(R)(-)-dimethyl 3-(4-isobutyl-phenyl)-2-oxobutan-1-phosphonate;

(S)(±)-dimethyl 3-(3'-phenoxy-phenyl)-2-oxo-butyl-1-phosphonate;

(R)(-)-2-(4-isobutylphenyl)-pentan-3-one;

(S) (+) ethyl-4-[(3'-benzoyl)phenyl]-3-oxopentanoate;

- (S) (+)-3-[(3'-benzoyl)phenyl]butan-2-one;
- (R)(-)-2-(4-isobutylphenyl)-4-phenyl-butan-3-one;
- (R)(-)-2-(4-isobutylphenyl)-5-phenyl-pentan-3-one;
- (R)(-)-2-(4-isobutylphenyl)-5-(pyrid-3-yl)-pentan-3-one;
- (R,S) 5-(4'-isobutylphenyl)-hexan-2, 4-dione;
- (R,S) 1-phenyl-5-(4'-isobutylphenyl)-2, 4-hexandione;
- (R,S) 1-(pyrid-2-yl)-4-(4'-isobutylphenyl)-1, 3-pentadione;
- (R) (-) 2-(4-isobutylphenyl)-7-*tert*-butoxycarbonylamino-heptan-3-one;
- (R,S) 2-(4'-isobutylphenyl)-3-oxo-butyl, methyl-sulfoxide;
- (R,S) 2-(3'-benzoylphenyl)-3-oxo-butyl, methyl-sulfoxide;
- (R,S) 2-(4'-isobutylphenyl)-3-oxo-butyl, methyl-sulfone;
- (R,S) 2-(3'-benzoylphenyl)-3-oxo-butyl, methyl-sulfone;
- (R,S) 2-(3'-phenoxyphenyl)-3-oxo-butyl, methyl-sulfone;
- (R,S) 2-(4'-isobutylphenyl)-3-oxo-butyl, phenyl-sulfone;
- (R)(-)-4-(4'-pyridyl)-2-[(4"-isobutyl)phenyl]butan-3-one;
- (R) (+)-5-[2-(4-isobutyl-phenyl)-propion-1-yl]-2, 2-dimethyl-1,3-dioxan-4, 6-dione;
- (R) (-)-5-[2-(3'-benzoyl-phenyl)-propion-1-yl]-2, 2-dimethyl-1,3-dioxan-4, 6-dione.
- (R)-2-[4-(1-oxo-2-isoindolinyl)phenyl]-3-oxo-valeramide;
- (R)-2-[4-(1-oxo-2-isoindolinyl)phenyl]-3-oxo-valeronitrile;

4. **(Currently Amended)** ~~A The method for preparing a medicament comprising~~
administering according to claim 1, wherein said compound is at least one of :

(R)(-) methyl 4-[(4'-benzoyloxy)phenyl]-3-oxopentanoate,
 (R)(-) methyl-4-[(4'-isopropylsulfonyloxy)phenyl]-3-oxopentanoate and
 (R)(-) methyl-4-{[4'-(2"-ethyl)phenylsulfonylamino]phenyl}-3-oxopentanoate,
 in an amount effective for the treatment of diseases that involve IL-8 induced human
 PMNs chemotaxis, together with a pharmaceutically acceptable carrier.

5. **(Previously Presented)** The method according to claim 1 or 2, wherein the steric configuration of the carbon atom to which the residue Ar is bound corresponds to the enantiomer (*R*).

6. **(Currently Amended)** The method according to claim 1 further comprising a pharmaceutically acceptable carrier~~A pharmaceutical composition comprising (*R,S*)-1-Arylethylketone compounds of formula I and their single (*R*) and (*S*) enantiomers:~~

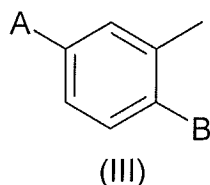
—wherein:

~~Ar represents phenyl, optionally substituted by one to three substituents, which are the same or different from one another, selected from:~~

~~halogens, C₁-C₄-alkyl, C₁-C₄-alkoxy, hydroxy, C₁-C₄-acyloxy, phenoxy, cyano, nitro, amino, C₁-C₄-acylamino, halogen-C₁-C₃-alkyl, halogen-C₁-C₃-alkoxy, benzoyl;~~

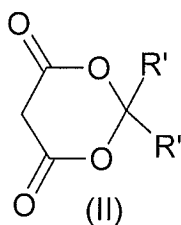
~~or Ar represents 4-thienoyl-phenyl, 4-(1-oxo-2-indoliny1)-phenyl, 3-chloro-4-(2,5-dihydro-1H-pyrrol-1-yl)phenyl, 6-methoxy-β-naphthyl, 1-hydroxy-phenyl-1-methyl;~~

~~or Ar represents a residue of formula III:~~



wherein A is benzyl, phenoxy, benzoyl, benzoyloxime, 1-hydroxy-phenyl-1-methyl, B is hydroxy, C₁-C₄-acyloxy or a group of formula $\text{O}-\text{C}(=\text{S})-\text{N}(\text{CH}_3)_2$, or $\text{S}-\text{C}(=\text{O})-\text{N}(\text{CH}_3)_2$; ~~Ra and Rb are independently chosen in the group of hydrogen, linear or branched C₁-C₆ alkyl, phenyl, α - or β -naphthyl, 2, 3, 4 pyridyl, C₁-C₄-alkylphenyl, C₁-C₄-alkyl(α - or β -naphthyl), C₁-C₄-alkyl(2, 3, 4 pyridyl), cyano (CN), carboxamide, carboxyl or carboxyesters of formula $\text{CO}_2\text{R}''$ wherein R'' is the residue of a linear or branched C₁-C₆ aliphatic alcohol, a phosphonate $\text{PO}(\text{OR}'')_2$ wherein R'' is as defined above, a group of formula $\text{X}-(\text{CH}_2)_n-\text{Z}$, wherein X is a CO, SO, SO_2 group; Z is H, *tert*-butyl, isopropyl, $\text{CO}_2\text{R}''$, CN, phenyl, α - or β -naphthyl, 2, 3, 4 pyridyl, C₃-C₆-cycloalkyl, NH-BOC, NH_2 ; n is zero or an integer from 1 to 3;~~

or Ra and Rb, with the carbon atom to which they are bound, form a cyclic residue 4, 6-dioxo-1, 3-dioxanyl 2, 2-disubstituted of formula II:



wherein R' is methyl or ethyl, or the two groups R' form a cyclohexane or cyclopentane ring, in admixture with a suitable carrier thereof.

7. (Canceled)

8. **(Currently Amended)** ~~A~~ The method for treatment of ~~a~~ according to claim 1, wherein said disease is selected from the group consisting of psoriasis, rheumatoid arthritis, ulcerative colitis, acute respiratory distress syndrome (ARDS), idiopathic fibrosis, glomerulonephritis, bullous pemphigo or for the prevention and the treatment of tissue damage caused by ischemia and reperfusion, ~~comprising administering the pharmaceutical composition of claim 6 to a subject requiring treatment for said disease or for ischemia and reperfusion.~~